

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) A method for the targeted transgenic expression of nucleic acid sequences in nonreproductive floral tissues of plants, comprising the following steps,
 - I. ~~introduction of~~ introducing a transgenic expression cassette into plant cells, wherein the transgenic expression cassette comprises at least the following elements
 - a) at least one promoter sequence selected from the group of sequences consisting of
 - i) ~~the promoter sequence~~[[s]] of SEQ ID NO: 1 ~~or 2 and~~
 - ii) ~~functional equivalents of the a~~ promoter sequence[[s]] having at least 70% homology to of SEQ ID NO: 1 or 2 with essentially the same promoter activity as a promoter of SEQ ID NO: 1 or 2 which targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants; and
 - iii.) ~~functional equivalent fragments of the sequences of i) or ii) with essentially the same promoter activity as a promoter of SEQ ID NO: 1 or 2;~~
 - iii) a promoter sequence having at least 95 % homology over at least 500 base pairs of SEQ ID NO: 1, wherein the promoter targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants; and
 - iv) a promoter sequence having at least 1000 base pairs of the 3' end of SEQ ID NO: 1, wherein the promoter targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants;
 - and

b) at least one further nucleic acid sequence, and

~~_____ c) optionally further genetic control elements,~~

wherein the at least one promoter sequence and the at least one further nucleic acid sequence are functionally linked together, and the further nucleic acid sequence is heterologous in relation to the promoter sequence, and

II. ~~selection of~~ selecting transgenic cells which comprise said expression cassette stably integrated into the genome,

and

III. ~~regeneration of~~ regenerating complete plants from said transgenic cells, wherein the at least one of the further nucleic acid sequences sequence is expressed essentially in all nonreproductive floral tissues[[.]] but essentially not in the pollen and the ovaries.

2. (Withdrawn-currently amended) The method according to claim 1, wherein the functionally equivalent fragment promoter sequence comprises [[a]] the sequence as shown in SEQ ID NO: 3 or 4.

3. (Withdrawn) A method for identifying and/or isolating promoters of genes which encode a promoter having specificity for nonreproductive floral tissue, wherein at least one nucleic acid sequence or a part thereof is employed in the identification and/or isolation, wherein said nucleic acid sequence encodes an amino acid sequence which comprises at least one sequence of SEQ ID NO: 23, 24, 25, 26, 27, 28, 29, 30, 31 or 32 or a variation of these sequences.

4. (Withdrawn) The method according to claim 3, wherein said nucleic acid sequence comprises a sequence of SEQ ID NO: 11, 13, 15, 17, 19 or 21.

5. (Withdrawn) The method according to claim 3, wherein the method is carried out with use of the polymerase chain reaction, and said nucleic acid sequence or a part thereof is employed as primer.

6. (Withdrawn) A method for producing a transgenic expression cassette having specificity for nonreproductive floral tissue, comprising the following steps:

- I. isolation of a promoter with specificity for nonreproductive floral tissue, where at least one nucleic acid sequence or a part thereof is employed in the isolation, where said nucleic acid sequence encodes an amino acid sequence which comprises at least one sequence as shown in SEQ ID NO: 23, 24, 25, 26, 27, 28, 29, 30, 31 or 32 or a variation of these sequences, and
- II. functional linkage of said promoter with a further nucleic acid sequence, where said nucleic acid sequence is heterologous in relation to the promoter.

7. (Withdrawn) The method according to claim 6, where said nucleic acid sequence comprises a sequence as shown in SEQ ID NO: 11, 13, 15, 17, 19 or 21.

8. (Withdrawn) The method according to claim 6, where the method is carried out with use of the polymerase chain reaction, and said nucleic acid sequence or a part thereof is employed as primer.

9. (Withdrawn) A polypeptide comprising an amino acid sequence of SEQ ID NO: 16, 18, 20 or 22.

10. (Withdrawn) A nucleic acid sequence encoding a polypeptide according to claim 9.

11. (Withdrawn) The nucleic acid sequence according to claim 10, comprising a sequence selected from the group of sequences of SEQ ID NO: 15, 17, 19 or 21 and the sequences derived therefrom as the result of the degeneracy of the genetic code.

12-13. (Cancelled)

14. (Currently amended) A transgenic expression cassette for the targeted transgenic expression of nucleic acid sequences in nonreproductive floral tissues of plants, comprising

- a) at least one promoter sequence selected from the group of sequences consisting of
 - i) the promoter sequence[[s]] of SEQ ID NO: 1 ~~or 2~~ and

- ii) ~~functional equivalents of the~~ a promoter sequence[[s]] having at least 70% homology to of SEQ ID NO: 1 or 2 with essentially the same promoter activity as a promoter of SEQ ID NO: 1 or 2 which targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants, and
- iii) ~~functionally equivalent fragments of the sequences of i) or ii) with essentially the same promoter activity as a promoter of SEQ ID NO: 1 or 2;~~ a promoter sequence having at least 95 % homology over at least 500 base pairs of SEQ ID NO: 1, wherein the promoter targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants; and
- iv) a promoter sequence having at least 1000 base pairs of the 3' end of SEQ ID NO: 1, wherein the promoter targets expression of a nucleic acid sequence in nonreproductive floral tissues of plants;

and

- b) at least one further nucleic acid sequence, and
- ~~_____ c) _____ optionally further genetic control elements,~~

where the at least one promoter sequence and the at least one further nucleic acid sequence are functionally linked together, and the further nucleic acid sequence is heterologous in relation to the promoter sequence, and wherein the promoter targets expression of the further nucleic acid sequence in nonreproductive floral tissues of plants.

15. (Withdrawn-currently amended) The transgenic expression cassette according to claim 14, wherein the ~~functionally equivalent fragment~~ promoter sequence comprises [[a]] the sequence of SEQ ID NO: 3 ~~or~~ 4.

16. (Currently amended) The transgenic expression cassette according to claim 14, where

- a) the at least one further nucleic acid sequence ~~to be expressed~~ is functionally linked with further genetic control sequences, or
- b) the expression cassette comprises additionally functional elements, or

c) a) and b) apply.

17. (Currently amended) The transgenic expression cassette according to claim 14, wherein the further nucleic acid sequence ~~to be expressed transgenically makes possible~~

a) ~~the expression of~~ encodes a protein encoded by said nucleic acid sequence, or

b) ~~the expression of~~ transcribes a sense-RNA, anti-sense RNA or double-stranded RNA ~~encoded by said nucleic acid sequence.~~

18. (Currently amended) The transgenic expression cassette according to claim 14, wherein the further nucleic acid sequence ~~to be expressed transgenically~~ is selected from the group of nucleic acid sequences encoding chalcone synthases, phenylalanine ammonium lyases, photolyases, deoxyxylulose-5-phosphate synthases, phytoene synthases, phytoene desaturases, lycopene cyclases, hydroxylases, "antifreeze" polypeptides, CBF1-transcription activators, glutamate dehydrogenases, calcium-dependent protein kinases, calcineurin, farnesyltransferases, ferritin, oxalate oxidases, DREB1A factor, trehalose-phosphate phosphatases, chitinases, glucanases, ribosome-inactivating protein, lysozyme, Bacillus thuringiensis endotoxins, amylase inhibitors, protease inhibitors, lectins, RNases, ribozymes, endochitinase, cytochrome P-450, acetyl-CoA carboxylases, amino acid transporters, monosaccharide-transporters, lycopene cyclases, carotene ketolases, endoxyloglucan transferases, $\Delta 6$ -acyllipid desaturases, $\Delta 6$ -desaturases, $\Delta 5$ -fatty acid desaturases, $\Delta 6$ -elongases and IPP-isomerases.

19. (Currently amended) The transgenic expression cassette according to claim 14, wherein the further nucleic acid sequence to be expressed ~~transgenically~~ is selected from the group of nucleic acid sequences described by GenBank Acc.-No.: M20308, BAB00748, U62549, U77378, S78423, U32624, L25042, X92657, AJ002399, D45881, AF163819, AB044391, AJ222980 and AF078796.

20. (Currently amended) A transgenic expression vector comprising an the expression cassette according to claim 14.

21. (Currently amended) A transgenic organism bacteria or plant, or cells, cell cultures, parts, tissues, organs or propagation material derived therefrom, transformed with an the expression cassette of claim 14.

22. (Cancelled)

23. (Currently amended) The transgenic organism plant as claimed in claim 21, wherein the plant is an selected from the group of agricultural crop plant[[s]].

24. (Withdrawn) A method for producing human or animal foods, seeds, pharmaceuticals or fine chemicals comprising culturing or growing the transgenic organism according to claim 21 or cells, cell cultures, parts, tissues, organs or propagation material derived therefrom.

25. (Withdrawn) A method for producing pharmaceuticals or fine chemicals in transgenic organisms according to claim 21 or cells, cell cultures, parts, tissues, organs or propagation material derived therefrom, where the transgenic organism or cells, cell cultures, parts, tissues, organs or propagation material derived from them is/are cultured or grown, and the desired pharmaceutical or the desired fine chemical is isolated.

26. (New) The method of claim 1, wherein the transgenic expression cassette further comprises genetic control elements.

27. (New) The transgenic expression cassette of claim 14, wherein the expression cassette further comprises genetic control elements.